

# STANFORD UNIVERSITY

MEDICAL CENTER  
PALO ALTO, CALIFORNIA

DEPARTMENT OF GENETICS  
School of Medicine

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DAvenport 1-1200  
Cables STANMED

TO: JL

FROM: Gene

- (2) The 5 MT<sub>1</sub> marker definitely linked to indole, may be near the ant (try<sub>0</sub>) locus, suggesting the possibility of an enzyme resistant to feed back inhibition. Enzymatic studies are underway to test this.

- (1) No positive results to report on the labeling by serine-3-C<sup>14</sup>. The experiment was done using SB 19, since all of our "serine" mutants grow very poorly on the normal amounts of serine (10 µg/ml). The labeling was found in most amino acids derived from the Krebs cycle, with a considerable amount in histidine. (Due to "C-1" incorporation into the C-2 position?). The tryptophan was isolated in very low quantities, and not much radioactivity was associated with this peak. Unfortunately the serine was largely destroyed by the alkaline hydrolysis. We shall next add serine only during the log phase, together with unlabeled Krebs cycle amino acids, and do both an acid and alkaline hydrolysis on the same lot of protein.

NESTOR

save for file.

very good!

4/19  
Hiroshima

How does the specific activity in tryptophan compare with say histidine? Rather puzzling, but perhaps should not attempt to interpret like the repeat experiment.

- (2) Perhaps resistant to test is effect as anthranilic acid occurs. in mutant blocked anth → indole, as anth readily picked up by fluorescence. May be resistant to rich by tryptophan as well as 5 MT.

- (3) Is 5 MT<sup>R</sup> at same locus as his<sup>S</sup>?  
How about selecting MT<sup>R</sup> in his<sup>S</sup> strain - does this abolish his<sup>S</sup>?  
Even ~~and~~ wilder, is MT<sup>R</sup> histidine-sensitive?  
Also check special sensitivity to other amino acids?